

# BOUNCE

BRT Series / Tile by Others

## Recessed LED Troffer

Bounce BRT series is a grid lay-in luminaire that enables the designer to select the top reflector material. Standard acoustical ceiling tile may be placed on top of the BRT for a low cost economical lighting solution where concealed LEDs indirectly illuminate the tile. Additionally, pretty much any imagineable material may be inserted on top of the BRT offering a unique opportunity for designers to transform grid ceilings into expressions of material, color, texture and light.

**Construction:** Standard housings are die-formed 22 gauge cold rolled steel with a matte white powder coat painted finish.

**Driver:** Reflector / driver cover is finished with high reflectant white paint. Drivers are standard constant current electronic drivers with 0-10V dimming input with dimming range from 100% down to 1% and Universal (UNV) voltage from 120 - 277V, 50/60 Hz.

**LED Module:** Distributed LED array in a variety of lumen output packages. LED color is available in 3000K, 3500K, 4000K or 5000K and in 80CRI or 90CRI. Module is replaceable. Projected life is 90% of the light output at 100,000 hrs.

**Mounting:** Installs into most grid ceilings (1", 9/16", and Tegular or "Slot-T"). May also be installed into inaccessible ceilings with a separate flange kit (FLG).

**Labels:** ETL Listed, conforms to UL Standard 1598/8750, CSA Standard C22.2 and Damp Location.

**Warranty:** 5-Year Warranty Standard

### ORDERING INFORMATION / Example: BRMT-24-45-L35-U-D-W-Armstrong/Lyra

| SERIES  | SIZE                | LUMEN PACKAGE <sup>2,3</sup> |                         |                           | CRI/CCT                    | BATTERY OPTIONS                               |
|---|---------------------|------------------------------|-------------------------|---------------------------|----------------------------|---|
| <b>BRT2</b> - Bounce Recessed, Top Tile by Others, Concealed LEDs on 2 sides.   | <b>22</b> - 2' x 2' | <b>2' x 2'</b>               | <b>2' x 4'</b>          | <b>4' x 4'</b>            | <b>L30</b> - 80 CRI, 3000K | <b>B5</b> - 5W Battery Pack                   |
|   | <b>24</b> - 2' x 4' | <b>20</b> - 2000 lumens      | <b>35</b> - 3500 lumens | <b>40</b> - 4000 lumens   | <b>L35</b> - 80 CRI, 3500K | <b>B7</b> - 7W Battery Pack                   |
|   | <b>44</b> - 4' x 4' | <b>25</b> - 2500 lumens      | <b>40</b> - 4000 lumens | <b>50</b> - 5000 lumens   | <b>L40</b> - 80 CRI, 4000K | <b>B10</b> - 10W Battery Pack                 |
|   |                     | <b>30</b> - 3000 lumens      | <b>45</b> - 4500 lumens | <b>60</b> - 6000 lumens   | <b>L50</b> - 80 CRI, 5000K | <b>B12</b> - 12W Battery Pack                 |
| <b>BRT4</b> - Bounce Recessed, Top Tile by Others, Concealed LEDs on 4 sides (4'sides are illuminated on the 2'x4' model) |                     | <b>35</b> - 3500 lumens      | <b>50</b> - 5000 lumens | <b>70</b> - 7000 lumens   | <b>H30</b> - 90 CRI, 3000K | <b>CEC</b> - CEC Compliant (10W Battery Pack) |
|   |                     | <b>40</b> - 4000 lumens      | <b>55</b> - 5500 lumens | <b>80</b> - 8000 lumens   | <b>H35</b> - 90 CRI, 3500K |   |
|   |                     | <b>45</b> - 4500 lumens      | <b>60</b> - 6000 lumens | <b>90</b> - 9000 lumens   | <b>H40</b> - 90 CRI, 4000K |   |
|   |                     |                              | <b>65</b> - 6500 lumens | <b>100</b> - 10000 lumens | <b>TW</b> - Tunable White  |   |
|   |                     |                              | <b>70</b> - 7000 lumens | <b>110</b> - 11000 lumens | 90 CRI, 2700-6000K         |   |
|   |                     |                              |                         | <b>120</b> - 12000 lumens |                            |   |

| VOLTAGE  | DRIVER <sup>5</sup>  | LUMINAIRE FINISH            | MOUNTING OPTIONS  | OPTIONS  | TILE BY OTHERS NOTES  |   |
|--|--|-----------------------------|---|--|---|---|
| <b>U</b> - Universal<br><b>1</b> - 120 Volt<br><b>2</b> - 277 Volt | <b>Dimming 0-10V</b><br><b>D</b> - Dim to 1% (Standard)<br><b>DD</b> - Dim to 1%, Fade to Off<br><b>DD2</b> - Eldoled Solodrive, Dim to 0%<br><b>TW10</b> - 0-10v Tunable White<br><b>LUTRON</b> - See options on page 2<br><b>DALI Dimming</b><br><b>ELE</b> - Eldoled Ecodrive, Dim to 1%<br><b>ELS</b> - Eldoled Solodrive, Dim to 0%<br><b>TWDA</b> - DALI Tunable White | <b>W</b> - White (Standard) | <b>FLG</b> - Flange kit for sheet rock ceiling applications | <b>CP</b> - Chicago plenum<br><b>SIC</b> - Seismic clips<br><b>GLR</b> - Fusing<br><b>FLEX3</b> - 6' of Flex, 3-wire | <b>FLEX5</b> - 6' of Flex, 5-wire<br><b>ETS</b> - Electronic transfer switch<br><b>GTD</b> - Generator transfer device<br><b>UP</b> - Unit pack | <b>Tile Mfg/ Prod Series-</b><br>Building in the "Tile by others" designation into the Nulite part number will help with job site coordination, ensuring that these materials get matched up with the BRT on the job site. Requires coordination with the architect and the manufacturer of the tile. |

**Notes:**  
 1. We recommend using large format [Certainteed Techstyle White](#) large format fiberglass panels for the 4'x4' product applications. Consult factory for coordination.  
 2. Lumen packages and inputs wattages will vary based on the customer selected top tile. Consult factory for assistance with regard to coordinating photometric data related to the material selected. A material sample will be required to conduct an actual photometric test

**PHOTOMETRIC DATA**

**BRT2-22-26-L35**

ITL Test #: ITL91578

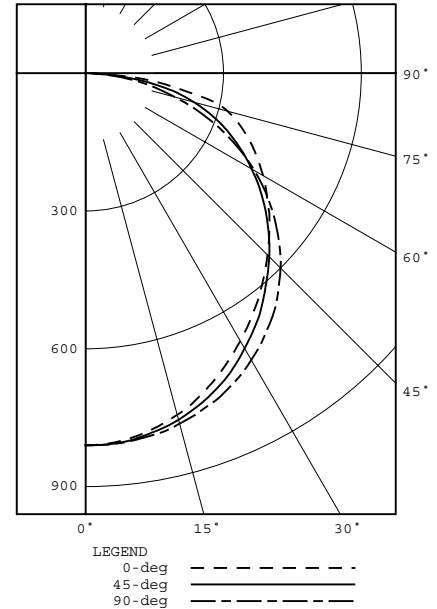
Total Delivered Lumens: 2622

Input Watts: 33.4

| ZONAL LUMEN SUMMARY |        |       |
|---------------------|--------|-------|
| ZONE                | LUMENS | %FIXT |
| 0- 30               | 633    | 24.1  |
| 0- 40               | 1045   | 39.8  |
| 0- 60               | 1912   | 72.9  |
| 0- 90               | 2622   | 100.0 |
| 90-180              | 0      | 0.0   |
| 0-180               | 2622   | 100.0 |

EFFICACY = 78.5 lm/W  
 CIE TYPE - DIRECT  
 PLANE : 0-DEG 90-DEG  
 SPACING CRITERIA : 1.24 1.32  
 BEAM ANGLE (50%) : 130.5 X 122.8 DEGREES  
 FIELD ANGLE (10%) : 171.5 X 166.3 DEGREES  
 LUMINOUS LENGTH :20.688 20.688

| LUMINANCE DATA IN CANDELA/SQ M |               |                |                |
|--------------------------------|---------------|----------------|----------------|
| ANGLE IN DEG                   | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
| 45                             | 2868.         | 2894.          | 3073.          |
| 55                             | 3050.         | 2961.          | 3081.          |
| 65                             | 3488.         | 3119.          | 3034.          |
| 75                             | 4478.         | 3414.          | 2813.          |
| 85                             | 4363.         | 2909.          | 2161.          |



**DRIVER INFORMATION**

| NULITE CAT# | DRIVER MANUFACTURER / SERIES                                | DIMMING / CONTROL PROTOCOL | DIM RANGE                             | NOTES/ DESCRIPTION   |
|-------------|---|----------------------------|---------------------------------------|--|
| <b>D</b>    | Signify Xitanium, Osram OT1                                 | 0-10v                      | 100% -1%                              | Standard Nulite driver, reflects base fixture price  |
| <b>D0</b>   | Signify Xitanium, Osram OT1                                 | 0-10v                      | 100%- 1% (Steps from 1% to 0% or OFF) | Standard Nulite driver, reflects base fixture price  |
| <b>D02</b>  | Eldoled Solodrive   | 0-10v                      | 100% - 0%                             | Able to choose from 4 dimming curve options  |
| <b>L11</b>  | Lutron Hi-Lume Premier (PEQ0E) Max lumen package 03         | 0-10v                      | 100% - 0.1%                           | Hi-lume Premier 0.1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology   |
| <b>L15</b>  | Lutron Hi-Lume Series (LDE1)                                | 0-10v                      | 100% - 1%                             | Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology   |
| <b>L16</b>  | Lutron 5 Series (LDE5)                                      | 0-10v                      | 100% - 5%                             | 5 Series EcoSystem LED Driver  |
| <b>ELE</b>  | Eldoled Ecodrive  | DALI                       | 100% - 1%                             |  |
| <b>ELS</b>  | Eldoled Solodrive   | DALI                       | 100% -1%                              | Able to choose from 2 dimming curve options  |
| <b>TW10</b> | Eldoled Dual Drive combined with Dual 0-10v DALI Translator | Tunable White, 0-10v       | 100% - 0%                             | 2 channel tunable white system mixes 2700K and 6000K LEDs on the same Nulite LED PCB to create any CCT between 2700K and 6000K. Two channel drivers will be programmed for constant lumen output throughout the CCT range. |
| <b>TWDA</b> | Eldoled Dual Drive  | Tunable White, DALI        | 100% - 0%                             |  |

## PRODUCT DETAILS

**LIGHT SOURCE** LED custom linear array is mounted with quick-connect wiring to facilitate service. A wide array of lumen packages are available. All luminaire configurations tested in accordance with IESNA LM-79. Diodes tested in accordance with IESNA LM-80.

**DRIVER** Standard constant current integral electronic driver with 0-10V dimming input standard; dimming range from 100% down to 1%. Dims to 0%, DALI, and Tunable white available. Universal (U), 120 volt (1), and 277 volt (2).

**TUNABLE WHITE** Aims to create environments that are optimal for visual, mental, and biological health. Two channel tunable white system mixes 2700K and 6000K LEDs on the same Nulite LED PCB to create any CCT between 2700K and 6000K. Two channel drivers will be programmed for constant lumen output throughout the CCT range.

**OPTIONAL DALI** Digital Addressable Lighting Interface is a simple two-wire control connection that goes to each fixture to form the control network. DALI enables dimmable transformers, relay modules, emergency fittings, and controllers from different manufacturers to be mixed and matched into a single control system, allowing LED drivers to be controlled independently from lighting control circuits.

### OPTIONAL BATTERY AND EMERGENCY OPTIONS

Recyclable Ni-Cad battery pack, battery run time is 90 minutes. Recharge time of 24 hours. 6W or 10W battery packs are available. Total output is determined by exact efficacy of specific configuration multiplied by battery wattage (i.e. RP13-B-FF-05L35-1C-U-D-W-4 with a 10W battery pack is a 1220 battery lumen output). Battery option not available in less than 4' lengths. Entire direct fixture housing is on battery for lengths up to 5'. 4' of direct fixture is on battery for 6' - 8' housing lengths. For bi-direct fixtures less than 72", the battery will be split equal power for the direct and indirect portions. For bi-direct fixtures 72" and longer, the full power of the battery will power 4' of the direct portion. Emergency or night light circuit available.

**MOUNTING** Designed to install into most grid ceilings (1", 9/16", and Tegular or "Slot-T"). May also be installed into inaccessible ceilings with a separate flange kit (FLG).

**WARRANTY** 5-year limited warranty on LED and driver from date of shipment. Refer to the full warranty details on [www.nulite-lighting.com](http://www.nulite-lighting.com).

**LUMINAIRE LENGTH** Standard luminaire sizes are nominal 2'x2', and 4'x4' designed to lay into common grid acoustical ceiling systems.

**WEIGHT** 2'x2'-12lbs, 2'x4'-24lbs.

**APPROVALS** ETL listed, conforms to UL Standard 1598 / 8750 and CSA Standard C22.2, indoor dry/damp locations.

### INDEPENDENT TESTING

**IESNA LM79** - Testing method for the Electrical and Photometric Measurements of Solid State Lighting on the complete system, such as luminous flux, electrical power, luminous intensity distribution, and various properties of chromaticity.

**IESNA LM80** - Testing method for measuring lumen maintenance of LED light sources, applies to the LED package, array or module alone, not the complete system.